

The simplest soil treatment is to till leaves and plant material, and washed egg shells in over time.

A method to introduce microbes into sterile compacted soil use in Central Park is to cut pencil sized twigs with the bark on into points. Hammer the pointed end into the soil about every three to four inches and cut off the remainder at the ground level. This takes several years. Gypsum sprinkled on the soil may also help to break up heavy clay. You can increase soil permeability for trees by using an auger to dig holes around the tree just beyond the branches and filling the holes with small gravel. As the tree grows, you will want to keep moving further out with your holes.

A study of the tropics showed two other ways to increase soil's habitat capability. In sterile areas of Africa farmers have been digging holes two feet deep, and several feet across and putting in a layer of organic matter like dead grass and manure. This creates a small watershed that collects run off. Chunks of wood in the holes attract termites which move out from the holes aerating the soil as they do. (see Zai Practice by E. Roose, V. Kabore, and C. Guenat) In South America, holes six feet deep were dug and filled with alternating layers of charcoal (made from wood, not the briquettes used for grilling), manure, and broken pottery. The charcoal and manure created the habitat for microbes and the broken pottery protected the area just under it from leaching.